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The Military-Environmental Complex and the Courts: Comment to Sarah Light

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THE MILITARY-ENVIRONMENTAL COMPLEX AND THE COURTS: COMMENT TO SARAH LIGHT

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In the United States, the military has always received special deference, culturally and legally. Servicemen and women are allowed to board commercial aircraft early. In Florida, as in other states, military personnel registering their cars are not required to pay an initial registration fee.[1] In environmental law, military exemptions are common. Section 118 of the Clean Air Act, which applies to pollution from federal facilities, provides that "[t]he President may exempt any emission source of any department, agency or instrumentality in the executive branch from compliance with such a requirement if he determines it to be in the paramount interest of the United States to do so."[2] Harm to marine mammals under the Marine Mammal Protection Act is generally interpreted broadly, but special provisions demote some of the harm caused by "military readiness activit[ies]."[3] Section 7(j) of the Endangered Species Act, the "pit bull" of environmental statutes,[4] provides that "[n]otwithstanding any other provision of this chapter, the [Endangered Species] Committee shall grant an exemption for any agency action if the Secretary of Defense finds that such exemption is necessary for reasons of national security."[5]

Far from expressing dismay over military exceptionalism, Sarah Light's contribution to this *Environmental Law Without Courts* Symposium points out how the "military-environmental complex" (MEC) has operated as a form of environmental law outside of review of the courts.[6] Defining the MEC as the Department of Defense (DoD) working with Congress, the President, and private military contractors, Light discusses three case studies in which the MEC has, purposefully or incidentally, promoted environmental goals as part of its national security mandate: (1) procurement through long-term renewable energy contracts, (2) using prizes to stimulate innovation, and (3) stimulating human interaction on

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1. FLA. STAT. § 320.072(d) (2015).
2. Clean Air Act § 118(b), 42 U.S.C. § 7418(b) (1972).
3. Marine Mammal Protection Act, § 3, 16 U.S.C. § 1362(18) (2003).
4. *See, e.g.,* Steven P. Quarles, *The Pit Bull Goes to School: The Endangered Species Act at 25: What Works?* 15 ENVTL. F. 55, 55 (1998).
5. Endangered Species Act § 7(j), 16 U.S.C. § 1536(j) (1973).
6. Sarah E. Light, *The Military-Environmental Complex and the Courts*, 32 J. LAND USE & ENVTL. L. 455 (2017).

best practices.[7] I will refer to these as "MEC green behavior." Military exceptionalism seems to have created the safe space for social responsibility that is structurally limited in other parts of corporate America. This is not to greenwash the MEC—it is unlikely that any corporation would risk the embarrassment of potentially extensive harm to charismatic cetaceans that is incident to the testing of a vital military readiness technology, SURTASS/LFA, or Navy sonar technology.[8] But clearly, one social benefit of military exceptionalism is that if the MEC wishes to pursue a green objective, it can do so with much less fear of retribution from shareholders, politically-motivated members of Congress, or the Competitive Enterprise Institute.[9]

I join Light in nodding to the progress made by the MEC in advancing some environmental goals, and agree that there is much good that can continue to be done by the MEC. Among other things, DoD will be a critical experimenter and adopter of a variety of adaptation strategies. The world's largest naval base in Norfolk is sinking, and what the U.S. Navy does to adapt will tell us a lot about ways to deal with sea level rise.[10] But it is worth drawing a distinction among the three case studies described by Light, because I am not sure all of this should be celebrated. In particular, there is a crucially important difference between energy procurement and the latter two forms of green behavior on the part of the MEC.

By its nature, procurement is an exchange—DoD is the consumer, and some private contractor is the supplier. The benefits are primarily private—DoD gets a good or service, and the suppliers receive payment. To be sure, there are often public side-benefits to the otherwise private transaction, along the lines described by Professor Light.[11] Especially for renewable energy, economies of scale from large military contracts are likely to be helpful in the industrial development of renewable energy sources. Some have

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7. *Id.*

8. *See, e.g.,* Winter v. NRDC, 555 U.S. 7 (2008).

9. The Competitive Enterprise Institute is a non-profit public policy organization dedicated to advancing the principles of limited government, free enterprise, and individual liberty. *About*, COMPETITIVE ENTERPRISE INST., https://cei.org/about-cei (last visited Apr. 2, 2017). The Competitive Enterprise Institute has aggressively fought climate policy, and has launched personal attacks on climate scientists, with one columnist writing of Pennsylvania State University climate scientist Michael Mann, that "[he] could be said to be the Jerry Sandusky of climate science, except that instead of molesting children, he has molested and tortured data." Chelsea Harvey, *In the Age of Trump, a Climate Change Libel Suit Heads to Trial*, WASH. POST (Dec. 23, 2016), https://www.washingtonpost.com/news/energy-environment/wp/2016/12/23/in-the-age-of-trump-a-climate-science-libel-suit-heads-to-trial/?utm_term=.35a04f870b41.

10. *See* Yuki Noguchi, *As Sea Levels Rise, Norfolk is Sinking and Planning*, NPR (June 24, 2014), http://www.npr.org/2014/06/24/324891517/as-sea-levels-rise-norfolk-is-sinking-and-planning.

11. Light, *supra* note 6, at 456.

noted that renewable energy technologies lag behind well-developed fossil fuel industries in the amount of knowledge that has been accumulated over time, fossil technologies enjoying almost a century's head start.[12] But on the other side of the ledger is the fact that the military is making some judgment about what is best, and doing so from within a decision structure that is typically competent, but not typically an incubator of creativity or challenge, and usually quite insulated from the kinds of constraints that everybody else faces. We appropriately have faith in markets to sniff out the most truly promising technologies, not military decision processes.

We should thus be a bit careful about embracing procurement—even long-term renewable energy contracts—too ardently, despite the benefits outlined above. We might prefer that DoD buy renewable energy instead of fossil fuel-generated energy on its own merits; the social cost of carbon could just well be large enough to justify the taxpayer paying a price premium for renewable energy rather than fossil fuel-fired energy. But which renewable energy sources? The MEC makes judgments about those sources but how do we know that those judgments are correct, or that they accurately forecast the state of the technological future? We do not. The problem with the MEC making these decisions is that it is a decision that should be made with the input of market signals, which are mostly blocked out of the military procurement process.

The MEC has the greatest potential to advance environmental goals by harnessing its enormous potential for research and development. Using taxpayer dollars to advance environmental goals as a side benefit is really most justifiable if the program generates positive externalities. And the positive externality generated by research and development is knowledge. Toward this end, the latter two MEC case studies identified by Professor Light—prizes and human interaction over best practices—are likely to generate the most knowledge.

Why would a prize be a better incubator of renewable energy technology than a long-term contract, which seems so much simpler? Imagine that the most efficient renewable energy source can generate X kilowatt-hours over Y years at a price of $Z. Now imagine two different tools: (a) a long-term renewable energy contract for X kilowatt-hours over Y years at a price of $Z, and (b) issuing a prize for a long-term contract for the lowest-cost bid for X kilowatt-hours over Y years. Would there be a difference in outcome? Quite possibly not, but perhaps. It is entirely possible that a different and superior renewable energy source might

12. *See* Daron Acemoglu et al., *The Environment and Directed Technical Change,* National Bureau of Economic Research Working Paper 15451 (2009).

emerge. Alternatives to the dominant renewable energy technologies—hydroelectric (dams), wind, and solar photovoltaic—have emerged recently. These alternatives include solar, thermal, and hydrokinetic energy, which have certain advantages that give them the potential to upset the renewable energy pecking order. A prize imposes *less* specificity than a contract and therefore forecloses fewer possibilities. Foreclosing as few options as possible is important, as some unforeseen technology, method, or organization may be the best way forward. DoD is now considering, for example, the use of smart grid technology and of distributed local energy generation, two energy models that have emerged not because of a rigorous and regimented development process, but because markets seem to have identified their potential.

DoD is also an unusually suitable entity to engage in some of the groundbreaking research that is needed to combat climate change. The most innovative institution in the history of humankind so far has arguably been Bell Labs, whose researchers have won (among many other awards) thirteen Nobel Prizes in Physics.[13] In my mind, second place belongs to DoD itself, which can boast of having developed the internet, Global Positioning System (GPS) technology, and mobile nuclear power generation technology that can be safely contained on a submarine.[14] Why has DoD been able to approach Bell Labs in success? Because few entities have ever had both the resources and the freedom to experiment that these two entities have had.

Finally, the third case study of MEC green behavior may be the most important of all—fostering human interactions so as to maximize the potential of collaborative creativity. Physical proximity and frequency of human interaction is one of the keys to creativity. It is why so much creativity occurs in *clusters,* whether that would be a lab, a space, or even a city or region, like Silicon Valley.[15] One of the most important and underappreciated lessons of the Bell Labs experiment is the impact of spatial arrangements on creativity. Bell Labs director Mervyn Kelly designed workspaces to maximize informal, chance interactions among different researchers. Researchers were intentionally made to walk long distances to restrooms and cafeterias, past other workspaces, so as to force them to encounter one another. A scientist on his way to

13. *Awards and Recognition*, BELL LABS, https://www.bell-labs.com/our-people/recognition/ (last visited Apr. 2, 2017).

14. *History and Timeline: Where the Future Becomes Now*, DEFENSE ADVANCED RESEARCH PROJECTS AGENCY, http://www.darpa.mil/about-us/darpa-history-and-timeline (last visited Apr. 2, 2017).

15. *See* Ben Waber, Jennifer Magnolfi & Greg Lindsay, *Workspaces That Move People*, HARV. BUS. REV. (Oct. 2014), https://hbr.org/2014/10/workspaces-that-move-people.

lunch was intentionally made to walk down a long corridor which was filled with other researchers, making that scientist "a magnet rolling past iron filings."[16] Also, researchers were not separated by specialty or function as research universities are, but made to interact and share space with those not in their specialty area.[17] Basic scientists were forced to interact with applied scientists, theoreticians with experimentalists, and physicists with chemists.[18] The conditions at Bell Labs were such that knowledge begat more knowledge. Bell Labs developed a huge and advanced stock of human capital so quickly because it was effective in *growing* it.

The MEC certainly has the potential to advance environmental goals because of its sheer size. Economies of scale are extremely important for energy providers, and the ability of the MEC to support renewable energy sources by buying a lot of it is vitally important to fledgling industries. But it is better still for the MEC, with its privileged position, to be generating something even more valuable: knowledge. Research and development and the resultant knowledge created, being public goods, are typically and dramatically undersupplied. The most useful thing that the MEC can do to advance environmental objectives is not necessarily to do the job itself (although it is capable) but to help generate the knowledge needed to do the job, and the many other currently unforeseeable tasks ahead, as the problem of climate change comes to a head.

16. JON GERTNER, THE IDEA FACTORY: BELL LABS AND THE GREAT AGE OF AMERICAN INNOVATION 77 (2012).

17. *Id.* at 79.

18. *Id.*